

August 14, 2003

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS  
ON THE  
FINAL 2000 L. G. HANSCOM FIELD  
ENVIRONMENTAL STATUS AND PLANNING REPORT

PROJECT NAME	:	Final 2000 Hanscom Field Environmental Status and Planning Report
PROJECT MUNICIPALITY	:	Bedford, Concord, Lexington, and Lincoln
PROJECT WATERSHED	:	Shawsheen River
EOEA NUMBER	:	5484/8696
PROJECT PROPONENT	:	Massachusetts Port Authority (Massport)
DATE NOTICED IN MONITOR	:	June 10, 2003

As Secretary of Environmental Affairs, I hereby determine that the Final 2000 Hanscom Field Environmental Status and Planning Report (FESPR) **adequately and properly complies** with the Massachusetts Environmental Policy Act (MGL c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00). Based on the information on the narrow set of remaining issues to be addressed in the FESPR, I find that the aspects and issues have been clearly described and general elements analyzed and that there is enough information in the FESPR to find the document adequate.

I wish to thank the Hanscom Area Towns Committee (HATS) and its Environmental Subcommittee for its thorough comments on the DESPR and FESPR. While issues do remain to be addressed by the proponent, I believe that Massport has made sufficient progress towards identifying potential impacts from the projects that will occur during the ESPR planning period. Throughout this certificate, I have outlined recommendations for Massport and where it should be focusing its attention in the submission of the 2005 ESPR. Prior to commencing the scoping of the 2005 ESPR, I recommend that Massport, HATS and the MEPA Office enter into a series of discussions on how the ESPR documents and the review process can be improved.

### **Project Description**

Hanscom Field comprises approximately 1,300 acres of land, located approximately 20 miles northwest of Boston, within the municipalities of Bedford, Concord, Lincoln, and Lexington. Since 1974, when Massport assumed ownership of the field, it has primarily accommodated private general aviation (GA) activity. The Federal Aviation Administration

(FAA) identifies Hanscom Field as a reliever airport. As a reliever to Logan Airport, Hanscom Field provides substantial airside relief by annually serving over 200,000 GA operations. Hanscom Field also supports limited commercial air service: approximately 134,000 passengers in 2001 and 6,414 operations, or 3% of the facility's total.

The FESPR inventories Hanscom's facilities and infrastructure, summarizes Massport's tenant audit program, identifies airport activity levels<sup>1</sup>, describes ground transportation, explains Massport's Environmental Management System, and provides information on Hanscom's planned role in the future regional transportation system and its 5-year projected improvement program. It also looks at noise and air quality levels under existing and alternative future scenarios, and identifies cultural, historic, conservation and recreational resources.

### **MEPA and the Environmental Status and Planning Report**

MEPA review is a non-adjudicatory information gathering process, which does not itself result in any formal decision approving or disapproving a project. The purpose of MEPA review is to provide a forum for the public analysis of potential impacts from state agency actions, in order to inform the ultimate actions of those agencies – in this case, Massport.

Since 1985, a series of ESPR documents (formerly known as the Generic EIR or GEIR) has provided a retrospective analysis of recent past trends in the environmental effects of activities at Hanscom Field while including analyses of potential future conditions under various scenarios. The ESPR also provides a list and description of all short-term and long-term capital projects that might be undertaken by Massport under alternative growth assumptions. As a result, these documents can provide a useful planning tool from which the proponent's policy and program developments are derived. The 2000 ESPR presents an overview of the operational environment and planning for future improvements at Hanscom Field and provides long-range projections of environmental conditions against which the effects of future individual projects may be compared. The ESPR allows reviewers to see historic environmental information, current information, and the forecast of the potential future environmental effects at Hanscom Field.

The ESPR provides a "big picture" planning context, in which large-scale policy and planning issues, as well as the cumulative impacts associated with current and anticipated activities, are publicly reviewed and addressed. The ESPR complements project-specific environmental reviews to help focus the review process and guard against segmented project analysis. The ESPR does not replace MEPA review of individual projects that exceed regulatory thresholds, nor does it relieve Massport of its obligations under MEPA for project specific analysis of impacts and mitigation. The ESPR serves as a vehicle for ensuring that long-term,

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<sup>1</sup> Massport was asked to determine if future forecast scenarios can be characterized by other descriptors other than number of flights such as annual air passenger levels. Massport has determined that annual air passenger levels at Hanscom represent a very small percentage of its overall operations (only about three percent of the flights in 2000) and cannot be utilized to forecast future scenarios.

broad-scope planning informs the review and implementation of individual actions at Hanscom Field.

### **Background on the Final 2000 Hanscom Field Environmental Status and Planning Report**

As described above, the ESPR includes a retrospective analysis as well as a description of projected future activities. Consequently, the scope for the 2000 ESPR was not issued until 2001,<sup>2</sup> and the Draft ESPR was reviewed in 2002. The Certificate on the Draft 2000 Hanscom Field ESPR (DESPR) was issued on December 16, 2002. It required the proponent to prepare a Final ESPR (FESPR) to address the issues that were not sufficiently evaluated in the DESPR and to respond to comments. This additional information, which is presented in the FESPR, completes the 2000 ESPR process.

In addition to the required technical analyses, the FESPR includes a copy of the DESPR Certificate, copies of all comments received, and a glossary of terms. It also provides a 1989 Airport Layout Plan and the 2002 Hanscom Field Air Passenger Survey and responses to comments received on the DESPR. The FESPR refers back to the DESPR noise contour figures for the forecast activity levels and years.

### **Major Issues Discussed in the FESPR**

- **Noise**

The FESPR addresses the measurement recommendations from the Noise Workgroup and Massport's efforts to implement the recommendations listed in Tables 7-3 and 12-1. In the FESPR, Massport provides information on the  $L_{\max}$  90dBA weighted noise contour. Massport does not adopt the use of the  $L_{\max}$  90dBA weighted noise contour, as recommended by the Noise Workgroup, because in Massport's evaluation it does not provide any useful measures when comparing different years and scenarios. A close and continuing working relationship between the proponent and the Noise Workgroup and the Environmental Subcommittee of HATS would help to provide for methods to address the noise impacts of airport operations between the submission of the 2000 and 2005 ESPR. Massport should consult with the Noise Workgroup and the Environmental Subcommittee of HATS on evaluating and possibly relocating the permanent noise monitoring equipment locations.

The FESPR also contains an analysis and review for areas that are affected by noise from aircraft upon start-up and take-off roll. It addresses the issue of engine run-ups and the operation of Auxiliary Power Units (APU) and Ground Power Units (GPU). Massport prohibits the use of APUs and GPUs outside of hangers during the nighttime unless it is part of a takeoff procedure.

In areas where noise complaints are common, Massport should consider ground

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<sup>2</sup> Similarly, the scoping for the 2005 ESPR will likely occur in 2006.

monitoring of these so-called “hot spots” to identify existing noise levels and the sources of this noise, and address potential measures to reduce noise impacts from its operations, based on proven techniques and acceptable standards for the type of land use in consultation with the Noise Workgroup and the Environmental Subcommittee of HATS.

In the FESPR, Massport has indicated that it restricts engine run-ups to specific areas. The 2005 ESPR should include an acoustical treatment to reduce noise impacts in these engine run-up areas. I recommend noise mitigation be proposed and implemented for the Wheeler-Merriam House in Concord when it is located within the 55dBA DNL contour. The 2005 ESPR should propose noise mitigation measures at other noise sensitive sites that fall within the established noise contours as they change over time.

- **Air Quality**

The FESPR adequately addresses the Department of Environmental Protection’s (DEP) comment regarding the following Environmental Management System (EMS) measures: airside operational improvements; ground service and landside conversions to alternate fuels; and the consideration of emission reduction credit purchases. Massport is proposing to construct an aircraft holding area at the head of Runway 23 for pilots completing their pre-flight checkout to reduce takeoff delays. At the present time, three Massport vehicles use either electricity or propane. Massport is also encouraging fixed base operators (FBO) to consider purchasing alternatively fueled vehicles, and it is considering alternatively fueled vehicles where practical. Because Massport does not operate a central power station at Hanscom, the purchase of NO<sub>x</sub> emission reduction credits is not applicable. Massport will also request its FBOs to discourage the use of APUs and GPUs.

- **Water Quality**

The FESPR reports the results of Massport’s groundwater and surface water monitoring program. While Massport does not plan to do further extensive ground and surface water monitoring, it has committed to do a limited monitoring program when it utilizes its proposed runway deicing chemicals. The proponent should be working with the adjoining communities to strengthen its monitoring program. I remind Massport that new and redevelopment projects will need to provide water quality controls, flood erosion, and sedimentation control for Elm Brook, Hartwell Brook, the Shawsheen watershed, and the groundwater supplies of public wells to comply with DEP regulations.

- **Sustainable Design**

Massport includes information on its sustainable design program and toxics reduction at the airport in the FESPR. Massport has instituted a Sustainable Development Program with

design (green technologies) and construction parameters and a Pilot Environmental Management System at Hanscom Field. It works with tenants to reduce the amount and toxicity of toxins used at the airport. I applaud such efforts, and invite Massport to consult with the EOEAs Sustainable Development policy team to determine if there are additional measures that can be added to the Hanscom program.

- **Mitigation Measures**

The FESPR includes a separate chapter on mitigation measures that summarizes actions described in the other FESPR chapters (such as TDM, noise abatement, and sustainability measures). Massport will continue to implement programs and procedures to manage environmental issues at Hanscom Field, and has committed to pursue TDM measures to address traffic issues. I note that Massport has abandoned its plan for roundabouts at Old Bedford Road/Lexington Road and at Lexington Road/Cambridge Turnpike Cut-off/Route 2A/Brooks Road that were described in the DESPR in response to concerns raised during the MEPA process.

Massport has committed to undertake the following potential mitigation measures when conditions warrant them:

- Provide a traffic control officer at Hanscom Drive/Route 2A during morning peak hours;
- Install a bus shelter at the Civil Air Terminal;
- Install bicycle racks at the Civil Air Terminal;
- Provide information about transit and non-auto travel options to prominent locations and on its website;
- Survey Hanscom air passengers;
- Implement an all-way stop at Hanscom Drive/Old Bedford Road to address the 2015 scenario;
- Implement parking fees at the Civil Air Terminal;
- Direct operators to Run-up Pad during the day and to the East Ramp at night for Run-ups;
- Investigate methods to reduce noise at the Wheeler-Merriam House;
- Install a paved aircraft holding area at the head of Runway 23; and
- Encourage FBOs to minimize the operation of APUs and GPUs.

The proponent's noise monitoring program should include individual aircraft identification of noise impacts and the monitoring of compliance with the "Fly Friendly" Program in the 2005 EPR. Given the success of the Fly Friendly program with GA pilots, I strongly urge Massport to investigate how its principles can be extended to reduce the noise impacts of commercial flights as well.

Given the physical constraints on Route 2A caused by the need to preserve the character of the National Park, traffic mitigation at Hanscom must focus on effective Transportation Demand Management (TDM) measures. Because Hanscom Field does not yet have a sufficient commuting population to support its own Transportation Management Association (TMA), I urge Massport to develop a partnership with the U.S. Air Force and other abutters, to facilitate an effective set of regional TDM measures. In the FESPR, Massport has selected TDM measures as mitigation to reduce traffic impacts. However, the proponent should not wait until the 2005 ESPR to implement TDM measures, but it should begin instituting the following TDM measures as soon as possible:

- Establish a Transportation Management Agency (TMA) with the Air Force and its contractors;
- Initiate parking fees at Massport parking facilities;
- Provide a TMA-sponsored shuttle service to a nearby commuter rail station;
- Provide reduced or free parking to carpoolers;
- Provide a guaranteed ride home program to employees and tenants; and
- Institute direct deposit of all Massport and tenant payroll checks.

### **Looking Ahead to the 2005 ESPR**

I look forward to receiving Massport's proposed Scope for the 2005 ESPR in 2006 or discussing other potential options for environmental review that might be more productive for Massport and the surrounding communities. While the 2000 ESPR provided a great deal of information on operations and environmental performance at Hanscom, two key issues, traffic and noise impacts, need to be addressed on an ongoing basis and will need to be dealt with in a more substantial and creative way in the 2005 ESPR.

In the 2005 ESPR, Massport should consider using the 55dBA DNL standard for buildings listed on State Register when it is determining mitigation measures. I believe that a higher standard than the Federal Aviation Administration standard of 65dBA may be appropriate for these historic buildings. Massport should outline the costs for such mitigation in the 2005 ESPR, or, alternatively, explain in detail the rationale for not implementing such mitigation measures if it determines that such mitigation is infeasible. In the 2005 ESPR, I ask Massport to consider implementing the following measures to reduce potential noise impacts:

- Institute night-time (11:00 pm to 7:00 am) landing fees for both GA and commercial flights that charge a penalty over daytime uses at the airport;
- Develop landing fees based on noise-generated by type of aircraft, with higher fees for noisier aircraft;
- Provide additional noise attenuation around run-up areas; and
- Extend the "Fly Friendly" program to commercial flights.

The 2005 ESPR should identify and describe the National Park Service's soundscape goals and plans for the Minute Man National Historical Park (MMNHP). The FESPR included all significant structures and other resources located within the MMNHP on maps. The 2005 ESPR should report on the interagency working group that was formed to review impacts on the MMNHP.

The 2005 ESPR must report on the current status of airport planning for the runway safety area, including a discussion of FAA standards, waiver possibilities, and the magnitude of environmental impacts associated with any planned safety work.

The DESPR Certificate asked the proponent to discuss the feasibility of constructing a new roadway through the Air Force Base to reach the East Ramp Area. This proposed roadway would provide access from the East Ramp Area to Hartwell Avenue. The 2005 ESPR should provide a more thorough discussion of the impacts of constructing this roadway.

The FESPR described existing landing fees at Hanscom, but did not provide sufficient details on the proposed changes through 2015. I anticipate that in the Scope of the 2005 ESPR I will require a further evaluation of different fee structures at Hanscom.

## **Conclusion**

The information contained in the 2000 ESPR is a valuable tool in understanding the facilities, infrastructure, operations, and airport activity levels at Hanscom Field and its potential effect on surrounding communities, residents and resources. Massport has expended considerable time and resources in preparing information for this voluntary filing, and should be duly acknowledged for their efforts. I believe that the information contained in the 2000 ESPR is vital to understanding the complexities in airport operations and environmental impacts. I also believe that the ESPR process can be streamlined and improved to better provide timely and convenient public access to environmental data and operations information. I am committed to working with Massport, HATS, local officials, and residents in advancing working toward this goal.

August 14, 2003

Date

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Ellen Roy Herzfelder

Cc: John Felix, DEP/NERO  
Senator John A. Hart Jr.  
Representative Thomas M. Stanley  
Representative Jay R. Kaufman  
Representative Anthony Petrucelli

Representative Eugene O'Flaherty  
Representative Martin J. Walsh  
Representative Brian P. Wallace  
Representative Michael F. Rush  
Representative Jeffrey Sanchez

Comments received:

David Kozak, 5/23/03  
John M. Stella, 6/2/03  
Bedford Selectmen, 6/3/03  
Massport, 6/5/03  
Massport, 6/10/03  
Richard D. Gilman, 6/11/03  
Representative Jay Kaufman, 6/16/03  
Leda Zimmerman, 6/17/03  
Caroline Partridge, 6/23/03  
Richard Canale, 6/25/03  
Massachusetts Business Aviation Assoc., 6/25/03  
Rizzo Assoc, 6/26/03  
John M. Stella, 6/30/03  
Representative Jeffrey Sanchez, 6/30/03  
North Suburban Chamber of Commerce, 6/30/03  
Lawton D. Read, 7/1/03  
Signature, 7/1/03  
Scott Burroughs, 7/2/03  
John D. Williams, 7/2/03  
AReCO, 7/2/03  
Finard & Co., 7/2/03  
Margaret Weeks, 7/2/03  
Susan Frommer, 7/2/03  
Kenneth A. Mabbs, 7/3/03  
Christina A. Thompson, 7/3/03  
John W. Wood, Jr., 7/6/03  
Alan S Penzias, 7/9/03  
M. Eliazar, 7/10/03  
William Manning, 7/10/03  
Sara Rummel, 7/15/03  
Massport, 7/15/03  
Lindsey C. Anderson, 7/17/03  
Representative Anthony Petrucelli, 7/21/03  
Concord Historical Commission, 7/23/03



Jane B. Gharibian, 7/24/03  
Representative Thomas M. Stanley, 7/24/03  
Sudbury, Assabet & Concord Wild & Scenic River Stewardship Council, 7/25/03  
Bedford Conservation Commission, 7/25/03  
Bedford Selectmen, 7/28/03  
Dr. Jerrold Van Hook, 7/28/03  
Madeline P. & John F. Testa, 7/28/03  
Lexington Selectmen, 7/28/03  
Lexington Conservation Commission, 7/29/03  
Lincoln Selectmen, 7/29/03  
Massport, 7/29/03  
Steve Lerner, 7/30/03  
Hanscom Area Towns (HATS) Comm., 7/30/03  
Boston University, 7/30/03  
DEP/NERO, 7/31/03  
Save Our Heritage, 7/31/03  
Boston Transportation Department, 7/31/03  
Concord Selectmen, 7/31/03  
Francis B. Magurn, 7/31/03  
Andrew Clerkin, 7/31/03  
Shuttle America, 7/31/03  
Anderson & Kreiger, 7/31/03  
Boston Environment Dept. 7/31/03  
Environmental Subcommittee HATS, 8/11/03

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